

07-06-07

AF/JFW



First Named Inventor	Wayne A. Wade
Serial No.	10/600,263
Filing Date	June 20, 2003
Group Art Unit	3781
Examiner Name	Stephen J. Castellano
Confirmation Number	7552
Attorney Docket No.	165.003US01
Title: THERMOPLASTIC MOLDED TANK	

**TRANSMITTAL  
FORM UNDER  
37 CFR 1.10  
(LARGE ENTITY)**

Mail Stop: APPEAL BRIEF - PATENTS  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**Enclosures**

The following documents are enclosed:

- Amended Appeal Brief (12 pgs.);  
 a return postcard.

Please charge any additional fees or credit any overpayments to Deposit Account No. 501373.

**CUSTOMER NUMBER 27073**

Leffert Jay & Polglaze, P.A.  
P. O. Box 581009  
Minneapolis, MN 55458-1009

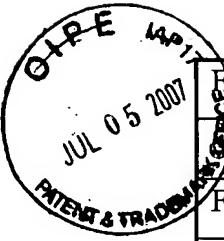
**Submitted By**

Name	Daniel J. Polglaze	Reg. No.	39,801	Telephone	(612) 312-2203
Signature				Date	July 5, 2007

**Certificate of Mailing**

"Express Mail" mailing label number: EV 836370543 US Date of Deposit: July 5, 2007  
These papers and fees are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated above and addressed to Mail Stop: APPEAL BRIEF - PATENTS, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

(LARGE ENTITY TRANSMITTAL UNDER 37 C.F.R. 1.10)



First Named Inventor	Wayne A. Wade
Serial No.	10/600,263
Filing Date	June 20, 2003
Group Art Unit	3781
Examiner Name	Stephen J. Castellano
Confirmation No.	7552
Attorney Docket No.	165.003US01

## AMENDED APPEAL BRIEF

Title: THERMOPLASTIC MOLDED TANK

### APPEAL BRIEF

Mail Stop: Appeal Brief - Patents  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

#### Table of Contents

I.	Introduction.....	1
II.	Real Party in Interest.....	1
III.	Related Appeals and Interferences.....	1
IV.	Status of Claims.....	1
V.	Status of Amendments .....	2
VI.	Summary of Claimed Subject Matter .....	2
VII.	Grounds of Rejection to be Reviewed on Appeal.....	2
VIII.	Argument .....	3
A.	Applicable Authorities.....	3
B.	Analysis.....	5
	(i) Preliminary Remarks.....	5
	(ii) Claim Rejections Under 35 U.S.C. § 103 .....	5
	(a) Claim 1 .....	5
	(b) Claim 8 .....	7
IX.	Conclusion .....	7
	APPENDIX A Claims Appendix.....	9
	APPENDIX B Evidence Appendix .....	11
	APPENDIX C Related Proceedings Appendix.....	12

**I.      Introduction**

Appellant filed a Notice of Appeal to the Board of Patent Appeals and Interferences on October 30, 2006. One copy of this Appeal Brief is hereby filed, in accordance with 37 C.F.R. § 41.37(a)(1), and is accompanied with a check in the amount of \$250.00 for the fee as required under 37 C.F.R. § 41.20(b)(2).

**II.     Real Party in Interest**

The present application has been assigned to Norwesco, Inc., a Minnesota Corporation having its principal place of business at 4365 Steiner Street, St. Bonifacius, Minnesota 55375 (hereinafter "Norwesco"), in an assignment from Wayne Allan Wade to Rochester Rotational Molding, Inc; and from Rochester Rotational Molding, Inc., to Norwesco, as evidenced in the supporting documentation filed with the power of Attorney filed March 24, 2006, in the present application.

**III.    Related Appeals and Interferences**

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present Appeal.

**IV.     Status of Claims**

Claims 1-2, 4-8, 18-19 and 21-22 are pending in the application. Claims 3, 9-17, and 20 were previously canceled. Independent claims 1 and 18 are the subject of this Appeal. The remaining dependent claims are appealed but not separately argued under the provisions of 37 CFR 41.37(c)(1)(vii).

In the Final Office Action mailed April 28, 2006, claims 1-2, 4-8, 18-19 and 21-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Redding (U.S.

Patent No. 3,552,599) in view of Clarke et al. (U.S. Patent No. 5,667,113). Claims 1-2, 4-8, 18-19, and 21-22 are appealed. See Appendix A for claims 1-2, 4-8, 18-19 and 21-22 involved in this Appeal.

**V. Status of Amendments**

All amendments to the claims have been entered.

**VI. Summary of Claimed Subject Matter**

The present claims are directed to septic tanks. Specifically, claim 1 is directed toward a thermoplastic molded septic tank 10 (p.8, l.13; p.8, l.20; Fig. 1) having a container with moldably connectable first and second chambers 14 and 16 (sometimes designated as upper and lower chambers) (p.8, ll.21-22; p.8, ll.27-28), one or more first ports 22 (p.8, l.30-p.9, l.3) formed in the chamber 14, and one or more second ports 32 (p.9, ll.6-12; Fig. 3) formed in the chamber 16, with the second ports having a smaller opening size than the first ports (p.9, ll.10-12; Fig. 3). A plurality of molded through hollow tapered columns 36 (p.9, ll.13-16; Fig. 3) are integrally engaged with the first and the second ports.

Claim 18 is directed to a septic tank having a container with a wall having an interior and an exterior surface (p.8, l.13; p.8, ll.20-25; Fig. 1), with a plurality of tapered hollow columns 36 (p.9, ll.13-16; Fig. 3) having end openings or ports 22 and 32 (p.8, l.30-p.9, l.3; p.9, ll.6-12; Fig. 3) with one end opening smaller than its opposite end opening (p.9, ll.10-12; Fig. 3), and means for integrally connecting the ends of the columns to the ports (p.9, ll.21-24).

**VII. Grounds of Rejection to be Reviewed on Appeal**

- Whether claims 1 and 18 are unpatentable under 35 U.S.C. §103(a) over Redding (U.S. Patent No. 3,552,599) in view of Clarke et al. (U.S. Patent No. 5,667,113)

since in part the Examiner erred in asserting that two adjoining ports with a required wall between them meets the claim limitation of hollow columns.

## VIII. Argument

### A. Applicable Authorities

#### 35 U.S.C. § 103

35 U.S.C. §103(a) provides in relevant part:

Conditions for patentability; non-obvious subject matter.

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

“The ultimate determination … whether an invention is or is not obvious is a legal conclusion based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.” *In re Dembiczak*, 175 F.3d 994, 998, 50 USPQ2d 1614, 1616 (1999) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966)).

When applying 35 U.S.C. §103, the claimed invention must be considered as a whole; the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention and a reasonable expectation of success is the standard with which obviousness is

determined. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

To establish a *prima facie* case of obviousness, three basic criteria must be met: (1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) There must be a reasonable expectation of success; (3) The prior art references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on appellants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. See, e.g., *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) (Claims were directed to an oil seal comprising a bore engaging portion with outwardly biased resilient spring fingers inserted in a resilient sealing member. The primary reference relied upon in a rejection based on a combination of references disclosed an oil seal wherein the bore engaging portion was reinforced by a cylindrical sheet metal casing. Patentee taught the device required rigidity for operation, whereas the claimed invention required resiliency. The court reversed the rejection holding the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." 270 F.2d at 813, 123 USPQ at 352.).

#### Definition of Claim Terms

Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999)).

**B. Analysis**(i) Preliminary Remarks

The Final Office Action mailed April 28, 2006 rejected all pending claims. The various rejections for those claims of issue in the Appeal will be discussed in relation to the corresponding references. However, a fundamental point of difference is the existence in the cited references of all of the elements of the present claims, and more specifically, the tapered molded through hollow columns.

(ii) Claim Rejections Under 35 U.S.C. § 103(a) Claim 1

The Office Actions and the Advisory Action in the present application have repeatedly and erroneously asserted that in Redding, the indentations 30 in the sides of the tank are ports, and that two ports 30, opposite each other, form a molded through hollow tapered column. The Advisory Action states, “the art discloses a plurality of molded through hollow tapered columns.” However, the “column” is neither hollow nor is it molded through. In fact, the two ports 30 meet at a wall 72. See Redding, col. 2, lines 61-66. This wall 72 blocks the alleged column so that it is not a “molded through hollow tapered column” as is recited in the claims. It is not hollow or molded through at all.

Further, the wall 72 is required in Redding, as it is specifically designed and has specific functions. The wall 72, as described in Redding, is specifically designed to give way at certain maximum internal pressures. See Redding, col. 3, line 30 through col. 4, line 5.

The Examiner also argues that Redding can inherently be used as a septic tank. However, the structure of Redding is specifically designed to allow ports 30 to expand from within without rupturing. See Redding, col. 3, line 30 through col. 4, line 5.

The tapered columns of the present claims 1 and 18 are “molded-through” and “hollow.” The Figures and specification, which must be considered when determining

scope of the claims, clearly show and describe columns that are hollow, that is, have no walls or obstructions therein. Redding, as has already been shown, does not have hollow columns that are molded through. The Office Action asserts that “hollow and molded-through” does not preclude a wall. By any definition of “hollow” and “molded-through” Appellant strongly disagrees. Further, it is clear from a reading of the specification, at page 10, lines 3-17, that a “wall” in the hollow columns would be directly in contrast to the uses of the tapered columns, including anchoring a tank, filling the columns with back-fill, allowing water to rise through a hollow, and the like. Appellant therefore submits that the terms of the claims preclude the structure of Redding. The ports of Redding are not hollow and through-molded as those terms are used in the present claims.

Clarke is cited only for port opening sizes. It does apparently show a front to rear through port, but is not amenable to burying like a septic tank, nor is the blow molded fuel tank of Redding. The claim that Redding is inherently capable of performing as a septic tank is wholly unsupported. If it truly is inherent, Appellant reiterates its request that a reference to support such a claim be provided. Despite the argument that such a function is inherent, Appellant has seen nothing to so indicate other than an argument from the Examiner, and that argument alone. There is no support for the argument.

It is clear from a reading of Redding that Redding’s product was never intended to be buried or to support the immense pressures of being buried. Instead, it is a vehicle fuel tank. Further, the ports 30 in Redding are specifically recited to allow the fuel tank to expand without rupturing under internal pressure. Instead of able to be used inherently as a septic tank, Appellant respectfully submits that the tank of Redding is inherently incapable of being used as a septic tank designed to withstand pressures. The Redding tank is designed to give under pressure, not withstand it. Neither is Clarke designed to be used as a septic tank. No combination of Redding and Clarke teaches or suggests the subject matter of the claims.

Because the rejection of claim 1 is premised on an erroneous interpretation of the cited art, and especially the required wall of Redding, which precludes its alleged “columns” from being hollow and through molded. Appellant contends that the rejections are improper and in error, and that claim 1 is allowable. For a more detailed

analysis of the rejections and Appellant's response thereto, please refer to Appellant's response to the Final Office Action, mailed August 28, 2006, and to its Pre-Appeal Brief Request for Review, each of which are incorporated by reference herein, but are not repeated for the purposes of brevity.

(b) Claim 8

The arguments set forth in support of the allowance of claim 1 apply equally to claim 18, since claim 18 contains very similar recitations to claim 1, specifically the plurality of tapered hollow columns and plurality of hollow substantially opposing ports, which have been shown above and in previous responses to office actions not to be present in Redding in view of Clarke et al.

Because the rejection of claim 18 is premised on an erroneous interpretation of the cited art, and especially the required wall of Redding, which precludes its alleged "columns" from being hollow and through molded. Appellant contends that the rejections are improper and in error, and that claim 18 is allowable. For a more detailed analysis of the rejections and Appellant's response thereto, please refer to Appellant's response to the Final Office Action, mailed August 28, 2006, and to its Pre-Appeal Brief Request for Review, each of which are incorporated by reference herein, but are not repeated for the purposes of brevity.

**IX. Conclusion**

Appellant has taught septic tanks having molded through hollow tapered columns. The apparatuses are distinct from the cited references, either alone or in combination, since the elements of the claims do not appear in, nor are they suggested by, the references. In view of the foregoing, Appellant contends that claims 1-2, 4-8, 18-19 and 21-22 are patentably distinct from the cited references, either alone or in combination, and should be allowed

Appellant has demonstrated that the references applied against the rejected claims do not teach or suggest, either expressly or inherently, each and every element as set forth in the claims. In particular, the references applied against the rejected claims, either alone or in combination, do not teach or suggest the molded through hollow tapered

columns and the septic tanks of the claims, but merely allege without support the elements and the suitability of the cited references for the purpose of septic tanks.

For at least the reasons discussed above, Appellant submits that the pending claims are patentable. Accordingly, Appellant requests that the Board of Appeals reverse the Examiner's decisions regarding claims 1-2, 4-8, 18-19 and 21-22.

Respectfully submitted,

Date: 5 July 2007



Daniel J. Polglaze

Reg. No. 39,801

Attorneys for Appellant  
Leffert Jay & Polglaze  
P.O. Box 581009  
Minneapolis, MN 55458-1009  
T 612 312-2200  
F 612 312-2250

**APPENDIX A**  
**Claims Appendix**

1. A thermoplastic molded septic tank, comprising:
  - a container, wherein the container includes an upper chamber moldably connectable to a lower chamber;
  - one or more substantially circular first ports formed with an opening in the upper chamber;
  - one or more substantially circular hollow second ports formed with an opening in the lower chamber, wherein the size of the opening formed in the second ports is less than the size of the opening formed in the first ports; and
  - a plurality of molded through hollow tapered columns integrally engaged with the first ports and second ports.
2. A thermoplastic molded tank as recited in claim 1, further comprising means for attaching the opposing ends of the plurality of molded through tapered columns to the first ports and to the second ports.
4. A thermoplastic molded tank as recited in claim 1, wherein the thermoplastic material is polyethylene.
5. A thermoplastic molded tank as recited in claim 1, further comprising means for securing the upper chamber to the lower chamber.
6. A thermoplastic molded tank as recited in claim 1, wherein the range of thickness of the upper chamber and the lower chamber is between 0.25 inch and 0.35 inch.

7. A thermoplastic molded tank as recited in claim 1, wherein the range of thickness of the upper chamber and the lower chamber is between 0.35 inch and 0.50 inch.
  8. A thermoplastic molded tank as recited in claim 1, wherein the range of thickness of the plurality of molded through tapered columns is between 0.1250 inch and 0.2500 inch.
18. A septic tank, comprising:
- a container formed with a wall having an interior surface and an exterior surface;
  - a plurality of tapered hollow columns having a distal end and a proximal end, wherein the distal end is dimensionally smaller than the proximal end;
  - a plurality of hollow substantially opposing ports formed with an opening through the wall; and
  - means for integrally connecting the distal end and the proximal end of the plurality of tapered hollow columns to the plurality of substantially opposing ports.
19. A septic tank as recited in claim 18, wherein the septic tank is formed of thermoplastic material.
21. A septic tank as recited in claim 19, wherein the integrally connecting means includes molding the container, the at least one tapered hollow column, and the plurality of hollow substantially opposing ports as a unitary body.
22. A septic tank as recited in claim 18, further comprising means for accessing the container.

**APPENDIX B**  
**Evidence Appendix**

There is no extrinsic evidence to be considered in this Appeal. Therefore, no evidence is presented in this Appendix.

**APPENDIX C**  
**Related Proceedings Appendix**

There are no related proceedings to be considered in this Appeal. Therefore, no such proceedings are identified in this Appendix.